2007 Rutgers Combined Research and Extension Plan of Work

Brief Summary about Plan of Work

The New Jersey five-year Plan of Work FY 2007 – 2011 is an integrated plan reflecting research and Cooperative Extension programs. The plan addresses all requirements set by the Agricultural Research, Extension and Education Reform Act of 1998 (AREERA) regarding the use of Hatch Funds, Smith-Lever 3(b) and 3(c) and required non-federal matching funds.

The plan reflects the work of the New Jersey Agricultural Experiment Station (NJAES) that addresses the diverse needs of a highly urbanized state. NJAES through station supported research and Cooperative Extension focuses on innovative approaches to applying the land grant model in support of an agricultural and food system at the urban/suburban fringe; sustaining natural resources; the development of human and community capital; and nutrition, health and wellness concerns. All programmatic efforts will result in social, economic and environmental impacts.

Stakeholders are actively engaged in the process of program planning and budget development. Our process for the generation and transfer of knowledge and technologies is best viewed as a continuum in an integrated system that conducts research and delivers Cooperative Extension educational programs to benefit communities, individuals, and industries always mindful of our commitment to reach underserved and underrepresented audiences.

Estimated number of professional FTEs/SYs to be budgeted for this plan.

Year	Extenion		Research	
	1862	1890	1862	1890
2007	156.0	0.0	65.0	0.0
2008	156.0	0.0	65.0	0.0
2009	156.0	0.0	65.0	0.0
2010	156.0	0.0	65.0	0.0
2011	156.0	0.0	65.0	0.0

Merit Review Process

The merit review process that will be employed during the 5-Year Plan of Work cycle

- Combined External and Internal University External Non-University Panel

Brief explanation

Evaluation of the FY2007-2011 Plan of Work through both merit and scientific peer review will be conducted to ensure the quality and relevance of the Cooperative Extension Program and to asses the technical quality and relevance of scientific research conducted through the New Jersey Agricultural Experiment Station.

Merit Review –

Peer institutions in the Northeast Region will be provided the opportunity to review the New Jersey 2007-2011 Plan of Work and comment on the relevance and quality of the Cooperative Extension program.

In addition to the peer review, stakeholders will continue to play a role in the review process as they assess programs for relevance in addressing local needs. Key reviewers in this process will be established advisory committees at the county, state level as well as program/center specific advisory committees.

Currently, all new Extension and Research initiatives and programs are reviewed by the respective NJAES Board of Managers committees. The Extension and Research committees of the Board of Managers have been functioning and have served as informal agents of merit review. In addition, Rutgers Cooperative Extension county advisory committees review county-based programs for relevance in addressing local needs.

Scientific Peer Review –

A formal internal review process will assess the technical merits of NJAES programs as well as the appropriateness of the proposed research to the research mission, goals, and programs of the NJAES.

Scientists external to NJAES will be asked to rate and comment on various aspects of the technical and scientific merit of the proposed research. The external review process is an established formal process that has proved effective in past reviews of Hatch projects within NJAES.

Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

Stakeholders are viewed as equal partners in the planning of programs and identification of critical issues. Stakeholder meetings are held in all 21 counties throughout the state to gain their input. Departments have advisory groups which help to identify needs. NJAES has a Board of Managers which provides stakeholder input.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

Stakeholder meetings are representative of the diversity for each of the counties and issues affecting the needs of the under-served and under-represented are an integral component of the program planning process.

3. How will the planned programs describe the expected outcomes and impacts?

Outcomes and impacts will be uniquely described based on the specific educational objectives or research questions.

The focus of all of our Extension/research efforts is to result in significant solutions to issues which have economic, social and/or environmental outcomes and impacts.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

Response will be unique to each program.

Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation (Check all that apply)

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Survey of the general public
- Other (focus group sessions)

Brief explanation.

Rutgers-NJAES has several mechanisms for stakeholder input which are used on a regular basis to inform decision-making. Over the coming years as we monitor and review this Plan of Work, we will put into place additional processes that feed input directly into the Plan of Work from our existing and diverse stakeholder input mechanisms.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief explanation.

Rutgers-NJAES research/Cooperative Extension will continue to employ strategies to engage residents of New Jersey in the identification of critical issues that will benefit from educational and research solutions provided Rutgers-NJAES faculty and staff. A variety of methods will be employed to reach out to underserved and under-represented audience to reduce any real or perceived barrier to participation in NJAES programs.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public

Brief explanation

The NJAES Administration regularly meets with stakeholder groups for discussion on program planning, and to discuss their topics of interest received during meetings with the Board of Managers, the numerous advisory groups, and the County Advisory Committee. Some advisory groups function to directly select the topics on which the faculty focus their activities, (such as in aquaculture), while others advise the NJAES on programmatic planning and inform the NJAES Administration on topics that are of concern to the group. Surveys, listening sessions and regular visits to stakeholder groups and attending related meetings, seminars and conferences form a major part of our efforts to identify emerging issues and to help direct research, extension and academic projects and programs to address those issues.

NJAES Board of Managers

Rutgers-NJAES has a formal stakeholder input mechanism mandated by the State of New Jersey. The NJAES Board of Managers is an advisory group appointed by the Rutgers University Board of Governors based on nominations by each County Board of Agriculture. The Board thus provides representation from the agricultural community from all 21 counties in the State. It also includes representatives from six other major constituencies related to the Cook/NJAES mission: environment, biotechnology, marine science, food science, community resources, and public policy. Through its regular formal meetings and committees, this Board provides input and advice to Rutgers-NJAES. The Board of Managers is important in making the appropriate links with key players in the State's agricultural and food system, and enhancing our understanding of the system's needs so that our programs better serve the State.

The Board of Managers has research, extension and teaching committees which provide valuable input directly to the respective deans, faculty and staff. These committees are extremely helpful in defining initiatives, identifying resources, establishing linkages, and pro-actively addressing important issues essential to the successful development of Rutgers-NJAES programs.

Departmental and Center Advisory Boards

Various academic departments and centers at Rutgers-NJAES have constituent and industry advisory boards that inform decision-making at the departmental and center level. These advisory boards meet between one and four times a year, depending on the department or the center. They provide valuable technical inputs and links with constituents.

RutgersCooperative Extension Community Forums

Rutgers Cooperative Extension (RCE) administration meets with local faculty and staff to obtain stakeholders input to identify future programmatic directions. In these forums, community leaders interact with RCE to identify social, economic and demographic trends and their future implications for county residents. In addition to identifying resident needs, they also clarify how RCE can forge partnerships, linkages and collaborations with agencies and grassroots organizations.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

As indicated earlier, stakeholders are viewed as equal partners in the planning, budget and program implementation processes. They are active participants on search committees in the hiring process for faculty positions, both at the agent and specialist level. Their opinions are welcomed and valued as emerging issues are identified and plans are developed to address critical needs related to educational programming and research initiatives.

1. Name of the Planned Program

Water Quality & Quantity

2. Program knowledge areas

- 112 Watershed Protection and Management 50 %
- 111 Conservation and Efficient Use of Water 20 %
- 605 Natural Resource and Environmental Economics 10 %
- 133 Pollution Prevention and Mitigation 20 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Through an integrated research and Cooperative Extension programmatic effort water quality and quantity issues affecting New Jerseyans will be addressed. An effective and efficient nutrient management and nutrient-trading program that meets the needs of industry and state regulatory standards. Water quantity and quality issues will be addressed through effective stormwater management and watershed restoration. The ultimate result of this programmatic effort will be a safe and secure water supply for all.

6. Situation and priorities

New Jersey is the nation's most urbanized state, with tremendous demands on the water supply and challenges for water quality due to industrial and wastewater impacts, and new municipal stormwater regulations. If New Jersey plans to successfully meet its goals, nutrient trading, wastewater treatment, and watershed restoration will have significant roles in preserving the water quality and quantity for the state. Research in determining the proper methods to create scientifically sound total maximum daily loads for nutrients in water is essential making decisions about nutrient management and trading.

7. Assumptions made for the Program

Extension will help meet the needs of communities and the public in understanding the new water quality standards and ways they can help their municipality meet those standards.
Water quality and quantity will become increasingly important as the demands by industry and communities intensifes with a growing population and increased urbanization.

8. Ultimate goal(s) of this Program

A safe and secure water supply for all communities and industries in the state
An effective and efficient nutrient management and trading program that meets the needs of industry and meets the standards set by the state regulatory bodies.

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	5.2	0.0	4.0	0.0
2008	5.7	0.0	4.0	0.0
2009	6.0	0.0	4.0	0.0
2010	7.0	0.0	4.0	0.0
2011	8.0	0.0	4.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Work with municipalities to help them meet their regulatory responsibilities on stormwater management and watershed restoration
Perform experiments to investigate what the current nutrient loads are in NJ water
Determine the best methodologies for developing Total Maximum Daily Load (TMDL) values for NJ waterways
Examine the effectiveness of alternative onsite wastewater treatment systems
Provide scientifically sound advice to state regulatory bodies on water quality issues
Math modeling of contamination transport in surface and groundwaters
Create a program comprising of faculty, staff, volunteers, industry partners and government officials

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

Municipalities
State Dept. of Environmental Protection
Staff and students who gain valuable scientific experience
Industry partners who learn ways to meet water quality standards
Communities who learn watershed restoration methods
NJAES Faculty and Staff involved in water research/outreach
School age youth
Residents

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	2000	30000	800	2000
2008	2500	40000	800	2000
2009	3000	45000	800	2000
2010	3500	50000	800	2000
2011	4000	60000	800	2000

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Short term
Knowledge of nutrient loads in various NJ waterways
Find the best methodologies for determining TDMLs

2007 Target: 15000
2008 Target: 16000
2009 Target: 17000
2010 Target: 18000
2011 Target: 19000

Output Text

Medium term
To identify representative pollutants and aquifer systems in New Jersey.
To develop equilibrium isotherms to quantify the adsorption/desorption kinetics for the pollutant/soil/water systems.
To develop breakthrough and leaching data for the pollutant/soil/water systems.

2007 Target: 18000
2008 Target: 19000
2009 Target: 20000
2010 Target: 21000
2011 Target: 22000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Long Term

A safe and secure water supply for all communities and industries in the state

An effective and efficient nutrient-trading program that meets the needs of industry and meets the standards set by the state regulatory bodies.

Outcome Type: Long

2007 Target:	20000
2008 Target:	21000
2009 Target:	22000
2010 Target:	23000
2011 Target:	24000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Increasingly strict regulatory water quality standards for phosphorus and other nutrients will affect the water nutrient trading program and affect the municipalities' ability to meet those standards.

State and local investment and support, including funds and manpower, in these research activities, are necessary for this program to be effective.

Partnerships with industry, government and communities will affect the ability to change or meet the regulatory standards.

Public education and involvement in helping to address water quality and quantity issues.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description
{NO DATA ENTERED}

1. Name of the Planned Program

Youth/Adult Obesity

2. Program knowledge areas

- 702 Requirements and Function of Nutrients and Other Food Components 25 %
- 701 Nutrient Composition of Food 10 %
- 724 Healthy Lifestyle 40 %
- 703 Nutrition Education and Behavior 25 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Through an integrated research and Cooperative Extension programmatic effort youth/adult obesity will be decreased in New Jersey resulting in a decrease in health problems and chronic diseases. Attitudes about healthy eating and physical activity will improve resulting in reduced health care costs and increase in life span.

6. Situation and priorities

Overweight and obesity are at epidemic levels in the US. The causes of obesity are complex and multifactoral. Nearly half of the children in North and South America will be overweight by 2010. Many lifestyle factors affect an individual's ability to address weight issues. Screen time has the strongest evidence of increasing the risk of obesity of any factor, couple that with overall sedentary lifestyle, large portion sizes, food marketing geared to youth, low consumption of Fruits, Vegetables, Whole Grains and Dairy can contribute to obesity for youth and adults.
The dietary fat is the major calorie generating nutrient in our diets. However, little is known about the genetic and physiological processes of how obesity occurs or how it contributes to other diseases. By understanding how the intestines and body uptake and process dietary fat, how external and dietary factors contribute to childhood and consequently adult obesity/diabetes, how weight loss affects bone mass and how certain hormones and genes affect fat absorption and breakdown, this program of research will contribute to a greater understanding of mechanisms that contribute to obesity.

7. Assumptions made for the Program

When individuals adopt healthy eating habits and regular physical activity, overweight, obesity, related risk factors and disease risk will decrease. Individuals will have improved health outcomes and quality of life.
Obesity and in particular, childhood obesity and related chronic diseases are becoming increasingly prevalent in our societies, including immigrant populations.

8. Ultimate goal(s) of this Program

Decreased overweight and obesity for youth/adults
Decreased risk factors for nutrition-related health problems and chronic diseases that are affected by diet and physical activity for youth/adults
A clear and comprehensive understanding of the genetic and physiological mechanisms of obesity and related chronic diseases
Pharmacological and/or medical treatments to alleviate the effects of obesity and related diseases

9. Scope of Program

- In-State Extension
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	4.9	0.0	5.0	0.0
2008	5.0	0.0	5.0	0.0
2009	5.0	0.0	5.0	0.0
2010	6.0	0.0	5.0	0.0
2011	6.0	0.0	5.0	0.0

Outputs for the Program

13. Activity (What will be done?)

· To identify the factors that promote excessive weight gain as well as protect against childhood obesity
· Measure how children born small for age are different with respect to body composition and risk for diabetes prior to developing diabetes or obesity.
· Investigate how perilipin A works in adipocytes to control fat storage and fat breakdown.
· Collect and analyze data on obesity-related measures (i.e., BMI) in adults and children
· Examine how weight loss affects calcium absorption and bone mass
· Create a multidisciplinary program comprising of faculty, staff, the medical community, industry partners and government officials
· Conduct adult/youth education and deliver targeted messages on healthy food choices and increased physical activity education using the following strategies:

Direct Methods:
· Educate Youth
· Educate Parents
· Educate Volunteers
· Food and Fitness Ambassadors
· Educate Professionals
  -Child Health Summit
· Educate Teachers/School Nurses
· Educate Communities
Indirect Methods:
· Website

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations • Other 1 (professional seminar)	• Newsletters • TV Media Programs • Web sites • Other 1 (Fact Sheets)

15. Description of targeted audience

Clinicians and Physicians Nurses School
Health Care Professionals
Hospitals (including teaching hospitals)
Staff and students who gain valuable scientific experience
Industry partners that benefit from fundamental and applied research in obesity and related chronic diseases
Communities that benefit from increased knowledge about the mechanisms involved in obesity
Other faculty and staff working on similar research
Health-related organizations and foundations interested in obesity/nutrition issues
School Age Youth
Teens
Teachers
After School Providers
Parents
Volunteers
Extension Professionals
State and County Agencies and Organizations

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	**Target**	**Target**	**Target**	**Target**
2007	3000	20000	1000	1000
2008	3500	20000	1500	1000
2009	4000	21000	2000	1500
2010	4500	22000	2500	2000
2011	5000	23000	3000	2500

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

Short Term

Individuals gain awareness, knowledge, skills related to:

- Attitudes about healthy eating for adults/youth
- Healthy food choices for adults/youth
- Selection of healthy foods for adults/youth
- Benefits of physical activity, (reduced overweight and obesity, reduced risk of diabetes, heart disease and cancer)
- Physical activity recommendations for health for adults/youth
- RCRE
- Identify factors that promote excessive weight gain as well as protect against childhood obesity
- Understand the molecular mechanisms of lipid transport in the intestinal cell
- Demonstrate the affects on calcium absorption and bone mass by weight loss.

2007	Target:	12500
2008	Target:	13000
2009	Target:	13500
2010	Target:	14000
2011	Target:	14500

Output Text

Medium Term

Individuals incorporate skills/Change behaviors related to:

Increased adoption of healthy food practices
Increased consumption of fruits, vegetables, whole grains and low-fat dairy
Increased participation in family meals
Increased participation in physical activity
Increased participation in family-related physical activity
Increased use of new “campaign” website.
Improved understanding of the relationship between early nutrition and later risk for chronic disease.
Understand the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need.
Understanding how the intestines and body uptake and process dietary fat
Identify genes, their protein product and how the proteins influences the way the body processes fat.

2007	Target:	13000
2008	Target:	13500
2009	Target:	14000
2010	Target:	14500
2011	Target:	15000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Long Term

Individuals experience:

Decreased overweight and obesity for youth/adults
Decreased risk factors for nutrition-related health problems and chronic diseases that are affected by diet and physical activity for youth/adults
A clear and comprehensive understanding of the genetic and physiological mechanisms of obesity and related chronic diseases
Pharmacological and/or medical treatments to alleviate the effects of obesity and related diseases

Outcome Type: Long

2007 Target: 16000
2008 Target: 17000
2009 Target: 18000
2010 Target: 19000
2011 Target: 20000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Long term, highly focused programmatic areas are expected. Budgets will continue to shrink OR traditional funding sources will no longer be an exception; new and competitive funds must be sought.
Internal funding priorities must be developed in order to determine the program area of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.
Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.
Increasing awareness and concern by the medical community, government officials and the public on the problem and negative effects of a growing obesity problem.
State and local investment and support, including funds and manpower, in these research activities, are necessary for this program to be effective.
Partnerships with clinicians, physicians, industry and government will affect the ability to conduct the necessary research in order to achieve the long term goals.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluation tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele and program efficiencies and effectiveness.

22. Data Collection Methods

- Sampling
- Whole population
- Mail
- Telephone
- On-Site
- Structured
- Case Study
- Observation
- Tests

Description
{NO DATA ENTERED}

1. Name of the Planned Program

Indoor Air Quality

2. Program knowledge areas

- 804 Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures 50 %
- 723 Hazards to Human Health and Safety 50 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Through an integrated research and Cooperative Extension programmatic effort indoor air quality issues will be addressed through educational programs to help decrease exposure to environmental risk factors.

6. Situation and priorities

Inthe last several years, a growing body of scientific evidence has indicated that the air within homes and other buildings can be more seriously polluted than the outdoor air in even the largest and most industrialized cities.

7. Assumptions made for the Program

When individuals have decreased exposure to environmental respiratory disease factors and chemical contaminants in the home, they will have improved health outcomes and quality of life.

8. Ultimate goal(s) of this Program

- Residents have reduced exposure to environmental determinants that contribute to respiratory disease
- Residents with respiratory disease successfully manage their disease in accordance with recommended practices
- Accurate diagnosis of environmental respiratory disease
- New construction meets the criteria to have good indoor air quality
- The best available technology is used to remediate homes for lead or radon

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	3.0	0.0	2.0	0.0
2008	3.0	0.0	2.0	0.0
2009	4.0	0.0	3.0	0.0
2010	4.0	0.0	3.0	0.0
2011	5.0	0.0	3.0	0.0

Outputs for the Program

13. Activity (What will be done?)

- Conduct quality & quantity of data on statewide asthma prevalence
- Organize network for developing and assessing asthma prevention and intervention efforts
- Provide in service training on air pollutants
- Provide educational programs for consumers
- Train public health workforce and healthcare providers on the dangers of environmental hazards of the home environment
- Promote and partner with initiative to improve numbers of children screened for elevated blood lead

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations • Other 1 (seminars)	• Newsletters • Web sites

15. Description of targeted audience

- Residents/Families
- Healthcare and Child Care Providers
- Healthcare professionals
- Policymakers
- Profit/Non-Profit organizations
- Businesses
- Schools
- Faith Communities
- Home Owners
- Landlords/Tenants
- Housing Authority
- Health Agencies
- State/Local Government
- Building/Housing Inspectors
- Local Health Departments
- Resident’s homes “identified as at risk”
- Environmental Association
- Media
- Agencies that collect data

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	2000	20000	0	0
2008	2000	20000	0	0
2009	2200	21000	0	0
2010	2200	22000	0	0
2011	2300	23000	0	0

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short Term
Increased recognition of environmental respiratory disease hazards in the residential dwelling service (realtors, lenders, inspectors, construction trades)
Increased awareness of policies related to indoor air
Established a comprehensive asthma surveillance program
Individuals have fewer emergency room and acute care visits related to asthma and other respiratory disease
Health professionals have increased continuing professional development on environmental respiratory disease
Families with children at-risk for lead poisoning have their children tested
Public health work force and healthcare providers have knowledge of environmental hazards in the home

Outcome Type: Short

2007 Target: 2000

2008 Target: 2500

2009 Target: 3000

2010 Target: 3500

2011 Target: 4000

Outcome Text

Medium Term

Increased number of buildings constructed to meet indoor air quality guidelines
Increased awareness of environmental respiratory disease among communities, healthcare providers and individuals
Increased access to knowledgeable healthcare providers and information sources
Increased use of uniform case definition and diagnostic protocols for respiratory disease
Increased ability to respond to indoor air problems by public health agencies
Increased number of homes at-risk that have participated in the NJ “Lead-Safe” or “Lead-Free” Registry

Outcome Type: Medium

2007 Target: 3000

2008 Target: 3500

2009 Target: 4000

2010 Target: 5000

2011 Target: 6000

Outcome Text

Long Term

Residents have reduced exposure to environmental determinants that contribute to respiratory disease
Residents with respiratory disease successfully manage their disease in accordance with recommended practices
Accurate diagnosis of environmental respiratory disease
New construction meets the criteria to have good indoor air quality
The best available technology is used to remediate homes for lead or radon

Outcome Type: Long

2007 Target: 3000

2008 Target: 4000

2009 Target: 5000

2010 Target: 6000

2011 Target: 7000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Long term, highly focused programmatic areas are expected. Budgets will continue to shrink OR traditional funding sources will no longer be an exception; new and competitive funds must be sought.
Internal funding priorities must be developed in order to determine the program area of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.
Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluation tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele and program efficiencies and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests
- Other (surveys)

Description

{NO DATA ENTERED}

1. Name of the Planned Program

4-H Youth Development

2. Program knowledge areas

- 806 Youth Development 100 %

3. Program existence

- Mature (More then five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

4-H Youth Development programming provides youth with an opportunity to gain a strong sense of self, master skills and become contributing members of society. The program encourages adult youth partnerships and community engagement.

6. Situation and priorities

A significant portion of New Jersey youth are at substantial risk for negative outcomes: poor health, substance abuse, teenage pregnancy, school failure, abuse, neglect, crime, violence. Poverty multiplies risk factors. Youth need to be in environments where they have opportunities to acquire the basic skills they need to become responsible family members, participants in the work force and contributing citizens. Youth need knowledge, skills, and behaviors to lead fulfilling lives.

7. Assumptions made for the Program

When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly; and positively influence their communities and beyond. On going and caring relationships with adults are essential to positive development. Extension will meet local needs through County Extension faculty and staff, while participating in regional and state-wide programs focusing on positive youth development in the mission mandate areas, as well as universal issues including Essential Elements (life skill development), Experiential Education, Youth /Adult Partnerships, and Volunteer Development and Leadership. Extension specialists and NJAES researchers will provide leadership and support to county faculty and staff in related programming.

8. Ultimate goal(s) of this Program

Youth demonstrate mastery and competencies needed to become engaged citizens by
- assuming leadership positions in communities.
- developing and implementing action plans to address community needs.
- becoming as productive members of the workforce.

4-H youth are active and engaged partners in 4-H youth development programming and decision-making regarding RCE programming, including but not limited to 4-H youth development programming.

4-H alumni and volunteers become engaged citizens by assuming leadership positions in communities

Youth development professionals and stakeholders influence decision makers in policy development related to youth development needs and issues.

9. Scope of Program

- In-State Extension
- Integrated Research and Extension
- Multistate Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	30.0	0.0	1.0	0.0
2008	30.0	0.0	1.0	0.0
2009	30.0	0.0	1.0	0.0
2010	30.0	0.0	1.0	0.0
2011	30.0	0.0	1.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Positive Youth Development:
- Employ Essential Elements (belonging, independence, mastery and generosity) as the basis for life skill development and related workforce development skills.
- Utilize Experiential Education Model (Experience, Share, Process, Generalize, Apply)

Provide opportunities for youth to:
- feel and believe that they are cared about by others (Attachment, Belonging, Connection)
- feel and believe they are capable and successful (Achievement, Mastery, Competence)
- know they are able to influence people and events (Autonomy, Power, Confidence)
- practice helping others through youth's own generosity (Altruism, Purpose, Contribution)

Subject matter:
(USDA/CSREES Mission Mandates)
Science, Engineering, Technology (includes: science literacy, animal science, plant science, environmental science, life sciences, etc)
Citizenship (includes youth engagement, community youth development, community service, character development, civic engagement, etc)
Healthy Lifestyles (includes chemical health, mental and emotional health, foods & nutrition, physical health and safety, etc)

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations • Other 1 (4-H Delivery Modes)	• Public Service Announcement • Newsletters • Web sites

15. Description of targeted audience

School Age youth (K – 13, one year out of high school) and their parents
4-H Volunteers (adult and youth)

Teachers/Educators/other youth development educators
School Age Child Care Providers
College Students (interns, collegiate 4-H)
Other Extension Professionals and university partners
Communities: stakeholders and non-profit, social service, government agencies
Under-served and under-represented audiences
Delivery modes:
4-H Clubs and related activities
4-H Afterschool (clubs and short-term programs)
4-H School Enrichment
4-H Special Interest
4-H Camping (day camps and overnight camping)
4-H Mentoring and Individual Study

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	2200	10000	45000	20000
2008	2250	10500	45500	20500
2009	2300	11000	46000	21000
2010	2350	11500	46500	21500
2011	2400	12000	47000	22000

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short Term

Youth increase awareness, knowledge, attitudes, and skills related to essential elements, workforce development, life skill development, and relevant subject matter.

Volunteers increase knowledge and awareness of practices fostering positive youth development, including youth/adult partnerships.

Youth development professionals and stakeholders increase awareness and knowledge of problems and solutions supporting positive youth development, including:

- policies that need to be addressed.
- community resources and support.

Outcome Type: Short

2007 Target: 30000

2008 Target: 31000

2009 Target: 32000

2010 Target: 33000

2011 Target: 34000

Outcome Text

Medium Term

Youth apply knowledge, attitudes, skills, and behaviors needed to become competent, caring and contributing citizens by:

- taking on leadership roles in their youth organizations and schools.
- working in partnership with adults in a variety of settings.

Youth and adults demonstrate effective partnerships through increased youth participation on advisory committees and other governing bodies.

Volunteers and youth development professionals apply practices fostering positive youth development.

Outcome Type: Medium

2007 Target: 35000

2008 Target: 36000

2009 Target: 37000

2010 Target: 38000

2011 Target: 39000

Outcome Text

Long Term

Youth demonstrate mastery and competencies needed to become engaged citizens by

- assuming leadership positions in communities.
- developing and implementing action plans to address community needs.
- becoming productive members of the workforce.

4-H youth are engaged partners in decision making regarding RCE programming including but not limited to 4-Hyouth development programming.

4-H alumni and volunteers become engaged citizens by assuming leadership positions in communities.

Youth development professionals and stakeholders influence decision makers in policy development related to youth

development needs and issues.

Outcome Type: Long

2007 Target: 38000

2008 Target: 39000

2009 Target: 40000

2010 Target: 41000

2011 Target: 42000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Youth risk factors)

Description

Long term, highly focused programmatic areas are expected by us and our clientele.
Budgets will continue to shrink OR traditional funding sources will no longer be an expectation; new and competitive funds must be sought.
Internal funding priorities must be developed in order to determine the program areas of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.
Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Description

Develop assessment and evaluation tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele and program efficiencies and effectiveness.

22. Data Collection Methods

- Sampling
- Mail
- On-Site
- Structured
- Unstructured
- Case Study
- Observation
- Portfolio Reviews
- Tests
- Journals

Description
{NO DATA ENTERED}

1. Name of the Planned Program

Agricultural Viability

2. Program knowledge areas

- 215 Biological Control of Pests Affecting Plants 20 %
- 601 Economics of Agricultural Production and Farm Management 50 %
- 604 Marketing and Distribution Practices 30 %

3. Program existence

- Mature (More then five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The program will aid agricultural producers, remain viable and sustainable in a rapidly changing environment and market place.

6. Situation and priorities

New Jersey's agricultural and related industries remains a vital sector of the state's economy ($866 million dollars in cash receipts from farm marketings in 2004) and environmental well-being. New Jersey's agriculture is diverse, encompassing a range of commodities, production methods, marketing techniques, processors and sales outlets. In addition, New Jersey's agriculture is changing -- evolving market needs, economic and other production constraints, an aging and changing (immigration, diversity) agricultural work force, an as well as mounting environmental issues and social constraints -- that can provide significant challenges and opportunities. In addition, non-food agricultural production (turf, equine, nursery, floriculture, etc.) is a large and growing segment of the agricultural economy must be addressed. Extension is the premier educational resource for the state's agricultural producers and natural resource managers. Extension must continue to remain relevant, timely, proactive and forward thinking, and must determine or reconfirm its current strengths, weaknesses and capacity before we can develop effective future efforts that meet the needs of the agricultural sector.

7. Assumptions made for the Program

* The viability of NJ's agriculture depends on innovative and relevant methods to help solve problems and develop solutions in the areas of production, processing, markets, human and natural resources, environment and policy.
* Extension will meet local needs through County Extension faculty and staff, while participating in regional and state-wide programs focusing on commodity production (turf, nursery, equine, fruit and vegetables) and marketing (processing, value added, economics), as well as universal issues including water, environmental degradation, policy, land use and availability.
* Extension specialists and NJAES researchers will provide leadership and support to county faculty and staff in commodity and issue related programming.

8. Ultimate goal(s) of this Program

New Jersey's agriculture will remain a viable and important industry.

New Jersey residents will recognize the importance of agriculture's contributions to societal well being (open space, quality of life) and will support the agricultural industry socially, politically and economically.

9. Scope of Program

- In-State Research
- Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	75.0	0.0	36.0	0.0
2008	75.0	0.0	36.0	0.0
2009	70.0	0.0	36.0	0.0
2010	70.0	0.0	36.0	0.0
2011	65.0	0.0	36.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Identify critical programmatic foci/needs based on Extension and stakeholder assessment. These can be broadly defined under three areas:

- Production BMPs (nutrient, pest, waste/by-products management, water quality and quantity, energy)
- Financial BMPs (marketing, labor, risk management, policy e.g. farmland preservation)
- Ag Systems (sustainable ag, organic ag, new crops and use/alternative)

Develop an inventory of local (county based), regional and statewide programs designed to meet these needs; identify team members and their roles.

Create a multi-task effort to generate and share research-based information with clientele through demonstrations, educational meetings and workshops, certification programs, trainings, development of recommendation and decision making guides, etc.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

Stakeholders (broadly defined to include producers, processors, marketers, end-users, policymakers, legislators)
Commercial agriculture producers and end-users (such as marketers, processors, consumers, etc.)
Municipalities and other governmental and non-governmental agencies, etc.

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	8500	1014000	85	140
2008	8600	1115000	90	150
2009	8700	1216000	95	160
2010	8800	1317000	100	170
2011	8900	1418000	105	180

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	2
2008	2
2009	2
2010	2
2011	2

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short Term

Increases in knowledge and skills of agricultural and horticultural industry professionals will occur.

- Nutrient management
- Pest management
- Waste/by-products management and utilization
- improving water quality and conserving water
- conserving energy
- marketing skills
- labor management
- risk management
- policy e.g. farmland preservation
- sustainable ag and organic ag production methods

· new crops and use/alternative crops

Outcome Type: Short

2007 Target: 30000

2008 Target: 40000

2009 Target: 50000

2010 Target: 60000

2011 Target: 70000

Outcome Text

Medium Term

Productive agricultural land is stabilized to meet the needs of the agricultural industry and the "open space" needs of people of NJ.

Agriculture remains a relevant and viable economic sector as profits increase (through reduced costs and/or increased or new sales or revenue streams).

Measurable reductions in environmental impact (clear and adequate sources of water, reduced waste, reduced soil losses, reductions in non-point source pollution, etc.) will occur through the adoption of improved and sound management practices.

Overall state environmental quality will be enhanced by agriculture, such as through the utilization and recycling of biowastes generated by the non-ag sector or the enhancement of air quality.

The products of NJ agriculture will add to the nutritional quality of New Jerseyans food.

Outcome Type: Medium

2007 Target: 35000

2008 Target: 45000

2009 Target: 50000

2010 Target: 55000

2011 Target: 60000

Outcome Text

Long Term

New Jersey's agriculture will remain a viable and important industry.

New Jersey residents will recognize the importance of agriculture's contributions to societal well being (open space, quality of life) and will support the agricultural industry socially, politically and economically.

Outcome Type: Long

2007 Target: 40000

2008 Target: 50000

2009 Target: 60000

2010 Target: 70000

2011 Target: 80000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Long term, highly focused programmatic areas are expected.

Budgets will continue to shrink OR traditional funding sources will no longer be an expectation; new and competitive funds must be sought.
Internal funding priorities must be developed in order to determine the program areas of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.
Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Sustainability of NJ Equine Industry and Its Impact on Agriculture and Open Space

2. Program knowledge areas

- 315 Animal Welfare/Well-Being and Protection 20 %
- 312 External Parasites and Pests of Animals 20 %
- 302 Nutrient Utilization in Animals 20 %
- 301 Reproductive Performance of Animals 20 %
- 303 Genetic Improvement of Animals 20 %

3. Program existence

- Intermediate (One to five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The Rutgers University Equine Science Center at the New Jersey Agricultural Experiment Station has combined the expertise of RCE specialists and research faculty in land use; water, pasture and waste management; endocrinology; equine nutrition; parasitology; exercise physiology; turf grass; entomology and many other disciplines to provide solutions to horse farmers, horse owners, traditional agricultural farmers with horse-related operations and the overall industry in New Jersey to ensure the viability of the industry and the vitality and well-being of the animal.

6. Situation and priorities

Equine Industry is the third largest agricultural commodity in New Jersey, generating over $300 million in revenue annually. The industry also positively impacts traditional agriculture and open space. The equine industry is extremely diverse, not organized and does not speak as one. In policy making, horse industry is not recognized as 1) cohesive, 2) an agricultural entity, or 3) an industry.

7. Assumptions made for the Program

Horse industry is extremely diverse and unorganized. Because there is a lack of organized leadership the industry has no pooled resources +/o staff. Participants range in horse management knowledge, in educational and professional scope and disposable income. It is assumed the individuals involved have the means to support the industry.
Extension specialists and NJAES researchers will provide leadership and support to county faculty and staff in commodity and issue related programming.

8. Ultimate goal(s) of this Program

Equine industry is unified and is economically sustainable
Equine industry is recognized as a critical component of the economic development, of traditional agriculture, and the preservation of open space

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	5.0	0.0	2.0	0.0
2008	6.0	0.0	3.0	0.0
2009	6.0	0.0	3.0	0.0
2010	6.0	0.0	3.0	0.0
2011	6.0	0.0	3.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Conduct 2006 Economic Impact Study

Horse Management seminars and Equine Science Update – county and statewide
Public relations and promotions
Actively engaged as outside speakers for the industry State 4-H horse program
Perform consultations to individuals and agricultural organizations

Maintain Research-based website

Conduct research to impact policy decisions for industry

Conduct Roundtables

Produce research based materials

Hold Annual Stakeholder meeting to Identify issues of importance

RUBEA – advisory committee

Facilitate the opportunity to network within the industry

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations	• Newsletters • TV Media Programs • Web sites

15. Description of targeted audience

Equine users – including, students/youth, equestrians, owners

Equine professionals: veterinarians, researchers, industry leaders, farmers, service providers, trainers, breeders, stable managers

Legislators/Government Officials/Industry Officials e.g. Racing Commission, Sport and Competition Officials (FEI, USEF)

Educators

General public

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	**Target**	**Target**	**Target**	**Target**
2007	4000	30000	3000	4000
2008	5000	35000	3000	10000
2009	5000	35000	4000	10000
2010	6000	40000	4000	10000
2011	6000	40000	5000	15000

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	1
2008	1
2009	1
2010	1
2011	1

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text
Short Term
New Jersey residents and government officials will be made aware of the importance of the equine industry

Equine enthusiasts take leadership roles to unify the industry and will acquire knowledge to support the industry's sustainability

Equine industry segments will learn the importance and benefits of speaking in one voice

Outcome Type: Short
2007 Target: 20000
2008 Target: 25000
2009 Target: 30000
2010 Target: 35000
2011 Target: 40000

Outcome Text
Medium Term
Diverse equine-related units are organized into one voice

Misperceptions by the general public re: the segments of equine industry are corrected

All uses of the horse are recognized as agricultural by local and state government officials

Outcome Type: Medium
2007 Target: 25000
2008 Target: 30000
2009 Target: 35000
2010 Target: 40000
2011 Target: 45000

Outcome Text
Long Term
Equine industry is unified and is economically sustainable

Equine industry is recognized as a critical component of the economic development, of traditional agriculture, and the preservation of open space

Outcome Type: Long

2007 Target: 30000

2008 Target: 35000

2009 Target: 40000

2010 Target: 45000

2011 Target: 50000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Political environment towards racing – lack of lobby media portrays equine as for the wealthy, unscrupulous. Urban residents don't appreciate horse industry. Major participants in sport/recreation portion of the industry are female. Many government officials/members of the public do not perceive all uses of horses as agricultural, and perceive horses as companion animals, not livestock.

* Long term, highly focused programmatic areas are expected. Budgets will continue to shrink OR traditional funding sources will no longer be an expectation; new and competitive funds must be sought.

* Internal funding priorities must be developed in order to determine the program areas of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.

* Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Home, Garden and Environment

2. Program knowledge areas

- 205 Plant Management Systems 100 %

3. Program existence

- Mature (More then five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

Clientele will learn about and make better choices to enhance the health, safety and well being of their homes, gardens, schools, parks and workplaces.

6. Situation and priorities

New Jersey's rural, urban and suburban populations requires accurate and sound management information on issues related to home horticulture (lawn and garden care, pest control, nutrient use, sound cultural methods), and household, structural and human-health pest management (termites, carpenter ants, ticks, bed bugs, mosquitoes, etc.). This audience purchases and utilizes the products of our agricultural sector (nursery, floriculture, etc.) as well as the services provide by lawn care companies, landscapers, pest control operators, etc. In addition to residential clientele, municipalities and other managers of public lands, including schools, parks and recreation areas, require information on maintenance of these purchased commodities and public lands. Extension is the premier educational resource to assist this clientele. Extension must continue to remain relevant, timely, proactive and forward thinking, and must determine or reconfirm its current strengths, weaknesses and capacity before we can develop effective future efforts that meet the needs of this large segment of our public.

7. Assumptions made for the Program

The needs of this large audience will continue to increase over time as NJ reaches complete build-out in the next 25 years.
This audience has traditionally been a second tier program by Extension. They will be recognized as important as the agriculture industry. The numbers of clientele and the value they bring through purchase of products and use of services from the agricultural and horticulture industry should be more appreciated, as should their potential role in advocacy for Extension.
Extension will meet local needs through County faculty and staff, while participating in regional and state-wide programs.
Extension
Extension specialists and NJAES researchers will provide leadership and support to county faculty and staff in programming.
Additional hires must be made to expand the range of expertise RCRE currently has in several of these areas.
Reorganization and prioritization of Extension programs, personnel and commitment to this area will occur.

8. Ultimate goal(s) of this Program

New Jersey's residents will reside, work and play in a healthy, safe, and sound environment -- in their homes, gardens, schools, parks and workplaces.

9. Scope of Program

- In-State Research
- Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	3.0	0.0	0.0	0.0
2008	3.0	0.0	0.0	0.0
2009	3.0	0.0	0.0	0.0
2010	3.0	0.0	0.0	0.0
2011	3.0	0.0	0.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Identify critical programmatic foci/needs based on Extension and stakeholder assessment broadly defined under two areas:

Environmentally sound gardening/lawn care:
· Home horticulture – lawn, garden and grounds management
· Commercial horticulture - professional management and maintenance

Environmentally sound household, structural pest control
· Home pest control – termites, carpenter ants, etc.
· Human-heath related pest control – mosquitoes, ticks, etc.
· A school IPM program will be developed to train end-users sound management techniques,

Develop an inventory of local (county based) and regional and statewide programs designed to meet these needs.

Identify team members and their roles.

Create a multi-task effort to generate and share research-based information with clientele, including research, demonstrations, educational meetings and workshops, certification programs, trainings, etc.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

Stakeholders:
· Homeowners and residential clientele
· Commercial horticulture professionals (management and maintenance)
· Commercial pest control operators
· Public health officials
· Municipalities and other governmental and non-governmental agencies, including Parks Commission, Public Health, Mosquito Commission, schools, etc.
· Local environmental commissions or others that have interest in these areas

Volunteers (trained via Master Gardener Program, Environmental Stewards Program), youth and others who can support and

benefit from these efforts

Underserved and underrepresented audiences

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	20000	6700	200	60
2008	21000	6800	210	70
2009	22000	6900	220	80
2010	23000	7000	230	90
2011	24000	7100	240	100

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short Term

Increased knowledge and improved decision making skills of professionals and volunteers (Master Gardeners and Environmental Stewards) working in commercial horticulture professions (management and maintenance), commercial pest control operators, public health officials, municipalities and other governmental and non-governmental agencies

Increased number of trained youth and adult volunteers, and measurable impact of their assistance on clientele.

Increased number of certified pest control operators.

Increased number of youth and adult clientele utilizing Extension information and service to improve their own and others knowledge and decision making skills.

Outcome Type: Short

2007 Target: 13000

2008 Target: 14000

2009 Target: 15000

2010 Target: 16000

2011 Target: 17000

Outcome Text

Medium Term

Educated youth and adult clientele, both professional and residential, utilize their newly gained knowledge and skills to implement and make changes such as:

- Efficient and effective pest control techniques
- Proper utilization of fertilizers and other soil amendments as needed based on soil testing
- Proper selection of plant materials to reduce need for chemical inputs
- Reduction in the damage caused by structural pests
- Reduction in health related incidents and costs association with human health vectors (ticks, mosquitoes).
- Protect health and safety of school children.
- Enhance or maintain environmental quality

Outcome Type: Medium

2007 Target: 35000

2008 Target: 40000

2009 Target: 45000

2010 Target: 50000

2011 Target: 60000

Outcome Text

Long Term

New Jersey's residents will reside, work and play in a healthy, safe, and sound environment -- in their homes, gardens, schools, parks and workplaces.

Outcome Type: Long

2007 Target: 40000

2008 Target: 45000

2009 Target: 50000

2010 Target: 60000

2011 Target: 70000

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Long term, highly focused programmatic areas are expected by us and our clientele.
Budgets will continue to shrink OR traditional funding sources will no longer be an expectation; new and competitive funds must be sought.
Internal funding priorities must be developed in order to determine the program areas of focus and the resources (personnel, operating) that will be provided by Extension and NJAES administration.
Collaborative partnerships – both internal and external – are necessary to accomplish these outcomes.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiencies and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Integrated Pest Management

2. Program knowledge areas

- 216 Integrated Pest Management Systems 100 %

3. Program existence

- Mature (More then five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

As the most densely populated state in the United States, New Jersey is experiencing environmental problems sooner and more severely than other states. We are challenged with land, water and air issues and attaining an efficient balance between production activities, the environment, and human health. New Jersey is a microcosm of both the challenges faced at the agricultural/environmental interface and the mutually beneficial solutions that are possible. As such, it has the potential to serve as a model of how to achieve greater harmony between agriculture and the environment.

6. Situation and priorities

There is increasing need to develop new pest management techniques, maintain existing IPM delivery programs and expand into new program and commodity areas. This need is in direct response to increasing internal and external forces from IPM stakeholders. Specifically, we need to: 1) continue to develop better techniques for delivery of IPM related information, and document the actual rate of IPM adoption, 2) address the public concerns regarding traditional pest management techniques in food and the environment, and 3) work with Federal and State legislators regarding implementation of new IPM methods and registration of new and useful pesticides.

IPM employs a variety of management techniques into comprehensive strategies to manage pest populations below economically and aesthetically damaging levels. IPM includes many general aspects of crop management such as environmental control and cultural practices (e.g. irrigation, fertilization, growth regulation) and may also be called integrated crop management or ICM. The program is designed to help commercial growers to produce top quality plants in the most economical means possible.

7. Assumptions made for the Program

IPM through protection of commodities, homes and communities with environmentally and economically sound practices will result in more sustainable production systems, promote abundant, high quality supplies of food & fiber products and an healthy quality of life.
Extension will help meet the needs of communities and industry by helping them learn new and standard IPM methods
Demand for decreased pesticide use will become more important as the demands by industry and consumers increase

8. Ultimate goal(s) of this Program

Protect commodities, homes and communities from pests
Increased abundance of high quality food and fiber products
Increased acreage in New Jersey grown under IPM practices
Reduced environmental problems associated with current pest management practices
A comprehensive understanding of best management practices for IPM that are economically viable and environmentally safe

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	23.0	0.0	13.0	0.0
2008	24.0	0.0	13.0	0.0
2009	24.0	0.0	13.0	0.0
2010	25.0	0.0	13.0	0.0
2011	25.0	0.0	13.0	0.0

Outputs for the Program

13. Activity (What will be done?)

Research

Develop new and novel techniques for pest management and pest detection

Delivery

· Provide IPM information to a wide variety of stakeholders
· Employ new methods for delivery IPM information

Education

· Conduct IPM educational programs for stakeholders
· Conduct IPM educational training for university students
· Conduct IPM educational training for Vo-Ag and FFA students
· Conduct IPM public awareness campaign

Work with communities, schools, businesses to help them meet their regulatory responsibilities on pesticide application
Help growers develop scouting programs to identify pest populations before significant plant damage occurs.
Develop pest management options to be used in an integrated or rotational program.
Identify indicators to help growers anticipate pest problems.
Develop monitoring techniques and population damage thresholds for selected pests.
Provide scientifically sound advice to state regulatory bodies on pest management and pesticide issues
Create a multidisciplinary program comprising of faculty, staff, volunteers, industry partners and government

officials
Investigate IPM methods to help growers produce top quality crops, limiting or reducing production costs.
Evaluate all pest and crop management practices into a set of commercially used methods. These include the use of: pesticides, economic/aesthetic threshold levels, resistant cultivars, optimum horticultural practices, environmental monitoring, pest scouting, and fertility monitoring and recommendations.

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	**Indirect Methods**
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

Municipalities
Pesticide applicators and their employers
Commercial pesticide applicators
State Dept. of Environmental Protection
Staff and students who gain valuable scientific experience
Industry partners in agriculture and related commodities
Consumers
NJAES Faculty and Staff involved in pest management research/outreach
Farmers
· Commodity groups
· New Jersey citizens
· School faculty, staff and children
· NJAES researchers
· Secondary and university students
· Governmental agencies
· Environmental organizations
· Agricultural, landscape, fine turf and other related industries

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	300	1000	10	100
2008	350	1500	15	150
2009	400	2000	20	200
2010	450	2500	30	200
2011	500	2500	50	250

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	0
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short Term

- Develop improved IPM delivery methods
- Develop detection, monitoring and sampling methods that reliably predict pest levels
- Develop novel management methods for a wide variety of pests
- Develop IPM training for secondary and university students
- Improve public awareness about IPM
- Determine the effectiveness of pheromones for mating disruption of pests
- Greater understanding of entomopathogenic nematode species' effects on pests
- Evaluation of the effectiveness of natural pesticides and crop management to reduce pests
- Determine which types of plants attract pests to be used as a pest control method

Outcome Type: Short

2007 Target: 700
2008 Target: 750
2009 Target: 800
2010 Target: 850
2011 Target: 900

Outcome Text

Medium Term

· Research and educational programs, and public awareness campaign increased adoption of IPM in traditional and non-traditional systems
· Research findings used to develop new projects
· IPM training of students creates new IPM interns, professionals and researchers
· Knowledge of various natural insecticides and their effectiveness on pests
· Determining the best time and application method for IPM products
· Greater understanding of pest biology and ecology
· Greater understanding of entomopathogenic species biology and ecology

Outcome Type: Medium

2007 Target: 1000
2008 Target: 1500
2009 Target: 2000
2010 Target: 2500
2011 Target: 3000

Outcome Text

Long Term

· Protect commodities, homes and communities from pests
· Increased abundance of high quality food and fiber products
· Increased acreage in New Jersey grown under IPM practices
· Reduced environmental problems associated with current pest management practices
· A comprehensive understanding of best management practices for IPM that are economically viable and environmentally safe

Outcome Type: Long

2007 Target: 1500
2008 Target: 2000
2009 Target: 2500
2010 Target: 3000
2011 Target: 3500

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Develop assessment and evaluation tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele and program efficiencies and effectiveness.
Federal, State and local investment and support, including funds and manpower, in these research activities, are necessary for this program to achieve its goals.
Partnerships with industry, government and communities will affect the ability to change or meet regulatory standards and consumer demand.

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description

{NO DATA ENTERED}

1. Name of the Planned Program

Aquaculture

2. Program knowledge areas

- 308 Improved Animal Products (Before Harvest) 60 %
- 135 Aquatic and Terrestrial Wildlife 40 %

3. Program existence

- Mature (More then five years)

4. Program duration

- Long-Term (More than five years)

5. Brief summary about Planned Program

The aquaculture program will help clientele become more informed about, and have access to, scientifically-sound aquaculture management practices and high quality, disease resistant aquaculture products (especially shellfish).

6. Situation and priorities

New Jersey's aquaculture resources are finite and can sustain only fixed harvests while the demand for quality fish and seafood continues to climb. Also, threats from disease and environmental contaminants and conditions provide additional challenges to producers to meet the demand for quality aquaculture products. In particular, shellfish resources along much of the Atlantic coast have been devastated by diseases. To meet this increased demand, commercial fishermen and others in the seafood industry must develop new sources of seafood products that are high quality and disease resistant.

Presently, total farm-gate sales value of reported harvest was approximately $5,787,000. Applying a standard fisheries multiplier of six, the economic contribution of aquaculture to New Jersey is approximately $34,722,000 annually. As aquaculture products becoming increasingly popular, the value of this industry will rise. Also, the impact of aquaculture on the industry and the communities that are involved in aquaculture is not well known and needs further study.

7. Assumptions made for the Program

Extension will help meet the needs of communities and the public in understanding the new water quality standards and ways they can help their municipality meet those standards.
Water quality and quantity will becoming increasingly important as the demands by industry

8. Ultimate goal(s) of this Program

Clear and comprehensive understanding of community, environmental, genetic and physical regulators of aquaculture quality and quantity
A safe and secure aquaculture industry that can meet consumer demands for high-quality products and also be environment friendly and economically viable
Creation of superior aquaculture products that will be of high demand outside NJ

9. Scope of Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- Multistate Research

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending other then formula funds or state-matching funds

- Yes

12. Expending amount of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2007	1.3	0.0	4.8	0.0
2008	2.0	0.0	4.8	0.0
2009	2.3	0.0	4.8	0.0
2010	2.7	0.0	4.8	0.0
2011	3.0	0.0	4.8	0.0

Outputs for the Program

13. Activity (What will be done?)

Investigate the genetic mechanisms for disease resistance and improved quality in economically important shellfish
Create a dynamic and cooperative partnership with faculty, staff, businesses, regulatory/advisory councils and the government to research best management practices and discover effective solutions and management practices to address threats to NJ aquaculture as well as investigate opportunities to increase the quality and quantity of the aquaculture harvest.
Collect and analyze data on how communities and businesses are affected by the aquaculture industry management practices
Examine the presence of unhealthy levels of contaminants in aquaculture products
Determine best techniques for shellfish hatcheries on- and off-shore

14. Type(s) of methods will be used to reach direct and indirect contacts

Extension	
Direct Method	Indirect Methods
• Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations	• Newsletters • Web sites

15. Description of targeted audience

Aquaculture-related businesses and employees
State Dept. of Environmental Protection
State Dept. of Agriculture
Industry partners who learn ways to improve or protect their harvests
Communities who depend on aquaculture-related revenue
NJAES Faculty and Staff involved in water research/outreach
Consumers of aquaculture products, including recreational fishing

16. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2007	100	300	30	300
2008	100	300	30	300
2009	100	300	30	300
2010	100	300	30	300
2011	100	300	30	300

17. (Standard Research Target) Number of Patents

Expected Patents	
Year	Target
2007	1
2008	0
2009	0
2010	0
2011	0

18. Output measures

Output Text

{NO DATA ENTERED}

Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}
Target: {NO DATA ENTERED}

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Text

Short term
Knowledge of seasonal variations for shellfish diseases
Create census data on communities involved in aquaculture
Determine the level of pollutants in economically important fish species
Develop markers and maps of important genetic traits
Knowledge of shellfish hatchery techniques that decrease time for growth to market size

Outcome Type: Short

2007 Target: 150

2008 Target: 200

2009 Target: 250

2010 Target: 300

2011 Target: 350

Outcome Text

Medium term
Identify spatial and temporal relationships between patterns of shellfish diseases in NJ and environmental correlates
To develop disease-resistant strains of shellfish
Develop superior disease-resistant and larger genetic lines of shellfish
Measure the impact of communities on the aquaculture industry
Knowledge of the feasibility of off-shore shellfish farming

Outcome Type: Medium

2007 Target: 200

2008 Target: 250

2009 Target: 300

2010 Target: 350

2011 Target: 400

Outcome Text

Long term
Clear and comprehensive understanding of community, environmental, genetic and physical regulators of aquaculture quality and quantity
A safe and secure aquaculture industry that can meet consumer demands for high-quality products and also be environment friendly and economically viable
Creation of superior aquaculture products that will be of high demand outside NJ

Outcome Type: Long

2007 Target: 250

2008 Target: 300

2009 Target: 350

2010 Target: 400

2011 Target: 450

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.
Environmental and weather conditions can dramatically affect the health and viability of shellfish beds and seedlings.
Significant business support

Partnerships with industry, government and communities will affect the ability to change or meet the regulatory standards
Dynamic and collaborative relationships with the various aquaculture advisory councils to review current, and create new regulations for the industry
Public education in understanding the factors that affect aquaculture and public awareness of health advisories related to shellfish/fish
Importation of diseases from other areas may affect the health of the state's aquaculture products

21. Evaluation studies planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

Develop assessment and evaluative tools that can measure our success of achieving these outcomes, the impact of our efforts on our clientele, and program efficiences and effectiveness.

22. Data Collection Methods

- Sampling
- Case Study
- Observation
- Tests

Description
{NO DATA ENTERED}